

# Work Order ID 58562

May 11, 2010 10:31:52 AM



Page 1

Item ID: D3443-1	Accept		Setup Start	
Revision ID:			Stop	
Item Name: Lug				
Start Date: 11/05/2010	Start Qty: 20.00		Cust Item ID:	
Required Date: 18/05/2010	Req'd Qty: 20.00		Customer:	
Reference:				

Approvals:	Process Plan: <u>1P</u>	Date: <u>10-5-11</u>	Tooling:	Date:	Run Start	
	QC:	Date:	SPC (Y/N):	Date:	Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D3443	Rev C								

100	BAND SAW	0.00							
	Bandsaw								
Jeaspa Bandsaw	Memo Cut blank 2.400 " long	0.00							

*MW*  
10/05/14 10/05/16  
20  
4  
2

110	HAAS CNC VERTICAL MACHINING #1	0.00							
	HAAS 1								
HAAS CNC vertical machine #1	Memo Machine as per Folio FA587 Rev: <u>C</u> & Dwg D3443 Rev: <u>C</u>	0.00							

*MW*  
10/05/14  
10/05/15  
19 3

210

120	QC2- Inspect parts off machine FAI/FAIB	0.00							
	QC								
Quality Control	Memo	0.00							

*MW*  
10/05/14  
10/05/15  
19 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-1 PAR #: \_\_\_\_\_ Fault Category: machining NCR: (Yes) No DQA: 1 Date: 10/05/17  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 10/05/20 Date: 10/05/20

NCR: <u>58562</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/05/16	110	part Tap 1/4-28NC broke 3 into the part R.C. Poor Quality of taps Tool in	<u>10/05/16</u>	Scrap and replace B#110378 Qty x2 Drill hole size is good.	<u>10/05/16</u>	<u>10/05/17</u>	<u>10/05/17</u>	<u>10/05/17</u>

NOTE: Date & initial all entries

# Work Order ID 58562

May 11, 2010 10:31:52 AM



Page 2

Item ID: D3443-1

Accept



Setup Start



Revision ID:

Item Name: Lug

Stop



Start Date: 11/05/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 18/05/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00

JL 10/05/17



QC

Memo

0.00

Quality Control

140

Identify as per dwg & Stock Location

0.00



Packaging

Memo

0.00

Packaging

10-5-18 (19x) SP

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10-5-19 10/05/2019

ME 10-5-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May 11, 2010 10:31:57 AM

Page 1

Work Order ID: 58562

Parent Item: D3443-1

Parent Item Name: Lug

Comments: A ☐ 05.11.14 ☐ New issue ☐ EC ☐  
IPP Rev:B Removed Tumbling 08-09-08 JLM Verified By:EC

Start Date: 11/05/2010

Required Date: 18/05/2010

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
M174B2.500X1.250		Purchased	No			100	f	7.0000	0.2			
17-4 SS BAR 2.500 x 1.250												

## Location

MAT031

110378

## Loc Qty

7

7

## Loc Code

mv =  
10/05/04

DJP  
10/05/16

4.2

+

0.4(f) mat/ 110378

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

D3065-5DART AEROSPACE LTD		Work Order:	57562
Description: Lug		Part Number:	D3443-1
Inspection Dwg: D3443	Rev: C	Page 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.000	+/-0.010	.996	✓			
0.342	+0.000/-0.005	.338	✓			
0.329	+/-0.010	.329	✓			
Ø0.500	+0.000/-0.005	.499	✓			
2.21	+/-0.030	2.217	✓			
Ø0.656	+0.000/-0.001	Ø .655	✓			
0.625	+/-0.010	.623	✓			
0.95	+/-0.030	.952	✓			
2.230	+/-0.010	2.229	✓			
0.229	+/-0.010	.230	✓			
0.370	+/-0.010	.368	✓			
0.525	+/-0.010	.525	✓			
0.524	+/-0.010	.524	✓			
0.390	+/-0.010	.390	✓			
1.048	+/-0.010	1.046	✓			
0.05 x 45°	+/-0.5°	.05 x 45°	✓			
R0.032	+/-0.010	R .032	✓			
0.470	+/-0.010	.468	✓			
0.165	+/-0.010	.164	✓			
1/4-28UNF	N/A	1/4-28UNF	✓			

Measured by:	MU
Date:	10/05/17

Audited by:	JL
Date:	10/05/17

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.07.11	New Issue	KJ/JLM	
B	09.11.04	Dwg Rev updated	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

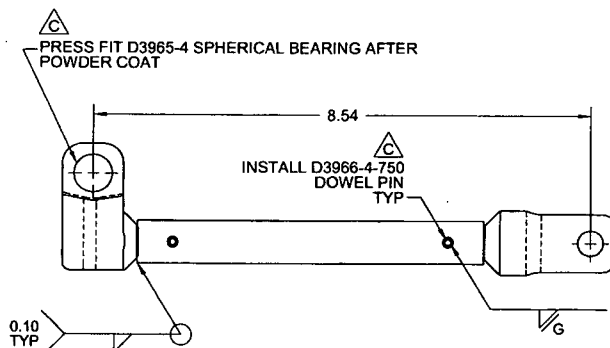
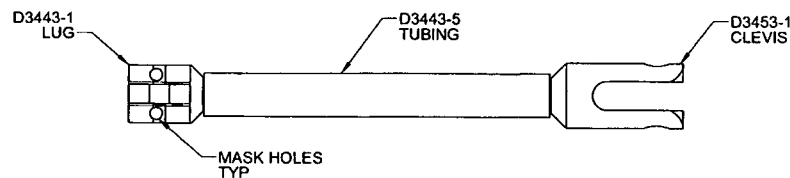
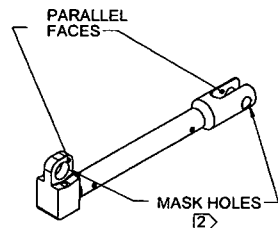
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



8 7 6 5 4 3 2 1



**D3443-041**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3  
NO POWDER COAT IN HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.33 lbs
- 8) WELD PER DART QSI 004

ITEM	QTY	P/N	DESCRIPTION
1	X	D3443-041	STRUT WELDMENT ASSEMBLY
2	1	D3443-1	LUG
3	1	D3443-5	TUBING
4	1	D3453-1	CLEVIS
5	1	D3965-4	BEARING, SPHERICAL
6	2	D3966-4-750	PIN, DOWEL

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 58562

*PD 10-5-11*

**RELEASED**  
9/15/12 S.M.

C	DRAWING UPDATED TO CURRENT STANDARDS. REVISED NOTE #2 (ZN A8-1, A8-2); 0.820 WAS 0.720 & 1.43 WAS 1.53 (ZN C2-3); 0.551 WAS 0.451 (ZN C1-3); R0.219 WAS R0.050 (ZN C4-3); D3965-4 WAS SPRENAUR P/N (ZN C6-1, B5-2); D3966-4-750 WAS MCMASTER-CARR P/N (ZN B5-1); REF PAR 09-018	RF	09.06.25
B	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & Ø0.125 WAS #30	RF	05.12.05
A	NEW ISSUE	RF	05.09.02
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	09.06.25		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3443** REV. C  
SHEET 1 OF 4  
TITLE **STRUT WELDMENT ASSEMBLY** NTS SCALE

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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

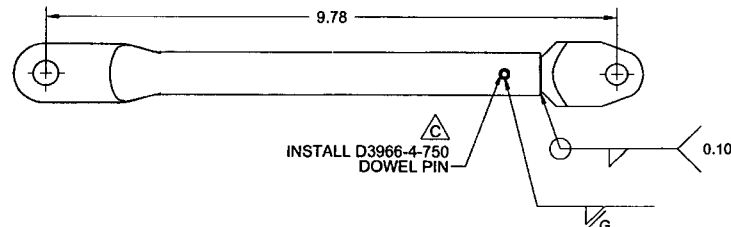
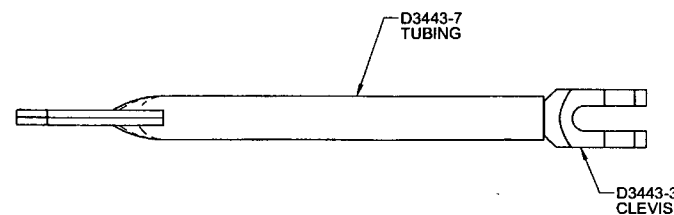
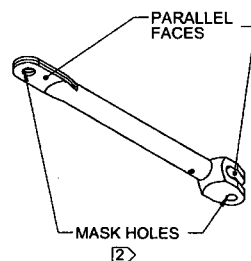
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	QTY -043	P/N	DESCRIPTION
1	X	D3443-043	STRUT WELDMENT ASSEMBLY
2	1	D3443-3	CLEVIS
3	1	D3443-7	TUBING
4	1	D3966-4-750	PIN



**D3443-043**

*w/o 5.8542*

**RELEASED**  
09/06/25

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3  
NO POWDER COAT IN HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.97 lbs
- 8) WELD PER DART QSI 004

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	UP	DRAWING NO. <b>D3443</b>	REV. C
MFG. APPR.			SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>STRUT WELDMENT ASSEMBLY</b>	<b>NTS</b>
DATE	09.06.25	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

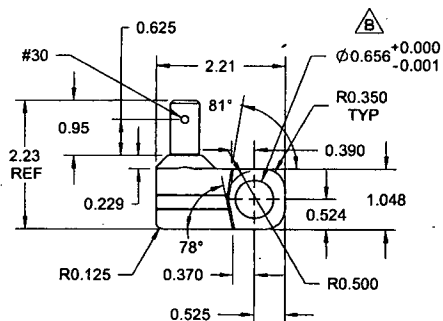
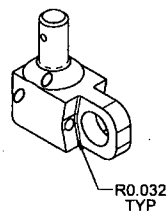
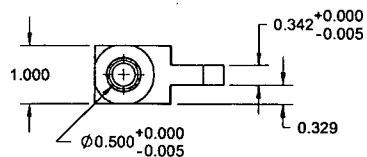
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

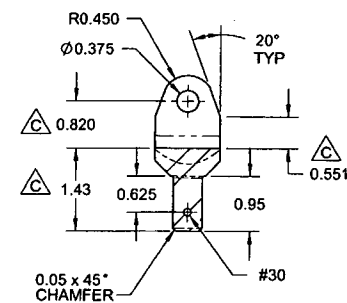
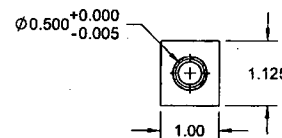
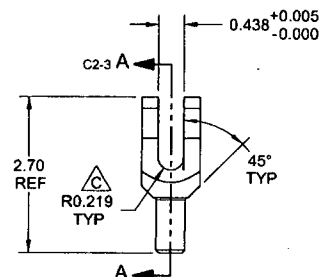
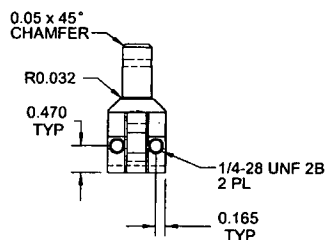
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D3443-1 LUG**



**SECTION A-A C4-3**

**D3443-3 CLEVIS**

**RELEASED**  
01/08/25/11/13

**NOTES:**

- 1) MATERIAL: D3443-1 = 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)  
D3443-3 = AISI 304 SS ROUND BAR (REF. DART SPEC M304R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3443-1 = 0.50 lbs  
D3443-3 = 0.35 lbs

*W/0 58562*

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	<b>D3443</b>	SHEET 3 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>STRUT WELDMENT ASSEMBLY NTS</b>	
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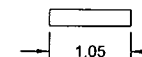
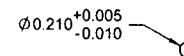
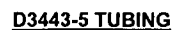
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

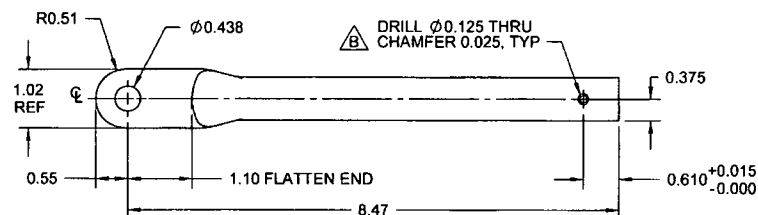
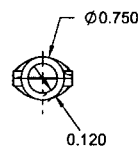
**NOTE:** Date & initial all entries



**D3443-9 PIN**

**D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A



### D3443-7 TUBING

**D3443-5/-7 NOTES:**

- 1) MATERIAL: A151 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.750W.120)  
2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.025 MAX  
6) IDENTIFICATION: NONE  
7) WEIGHT: D3443-5 = 041 lbs  
D3443-7 = 062 lbs

w/o 58562

RELEASE  
01/08/23 MP

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA  DRAWING NO. <b>D3443</b>  TITLE <b>STRUT WELDMENT ASSEMBLY</b> NTS	REV. C
DRAWN	RF		SHEET 4 OF 4
CHECKED	RF		SCALE
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	09.06.25	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINTED TO SCALE. THE DIMENSIONS SHOWN ON THIS DRAWING ARE THE DIMENSIONS OF THE PARTS AND NOT THE DIMENSIONS OF THE PARTS OR COMPONENTS TO BE MANUFACTURED BY ANY OTHER PERSON OR ENTITY.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries